

Amendments to the Claims:

Please amend claim 1 as indicated below.

Please cancel claims 6-7 without prejudice.

Please add new claims 12-20 as presented below.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A scanning microscope having a detector, arranged in a detection beam path, for receiving detection light proceeding from a sample, a monitoring means that measures the light power level of the detection light, and an optical shutter means between the sample and the detector with which the detection beam path can be blocked based on the light power level of the detection light exceeding a definable threshold.

Claim 2 (original): The scanning microscope as defined in Claim 1, wherein the detector is a non-descan detector.

Claim 3 (original): The scanning microscope as defined in Claim 1, wherein the detector is a descan detector.

Claim 4 (original): The scanning microscope as defined in Claim 1, further comprising a control means for controlling the shutter means.

Claim 5 (original): The scanning microscope as defined in Claim 1, wherein the detection beam path can be automatically opened up before the beginning of a scanning operation, and blocked at the end of the scanning operation.

Claims 6-7 (canceled)

Claim 8 (original): The scanning microscope as defined in Claim 4, wherein the control means extrapolates the future change over time in the detection light power level, and wherein the detection beam path is automatically blockable when the light power level of the detection light is expected to exceed a definable threshold.

Claim 9 (original): The scanning microscope as defined in Claim 1, wherein the shutter means contains a mechanical shutter or an electrooptical element or acoustooptical element or LCD element.

Claim 10 (original): The scanning microscope as defined in Claim 1, wherein the detector contains a photodiode, in particular an avalanche photodiode, or a CCD element, in particular an EMCCD element, or a photomultiplier or photomultiplier array.

Claim 11 (original): The scanning microscope as defined in Claim 1, wherein the scanning microscope is a confocal scanning microscope.

Claim 12 (new): A method for scanning a sample, comprising:
providing a microscope having a detector disposed in a detection beam path and configured to receive detection light proceeding from the sample;
measuring the light power level of the detection light using a monitoring means; and
blocking the detection beam path, when the light power level of the detection light exceeds a definable threshold, using an optical shutter means disposed between the sample and the detector.

Claim 13 (new): The method as defined in Claim 12, wherein the detector is a non-descan detector.

Claim 14 (new): The method as defined in Claim 12, wherein the detector is a descan detector.

Claim 15 (new): The method as defined in Claim 12, further comprising controlling the shutter means using a control means.

Claim 16 (new): The method as defined in Claim 12, further comprising automatically opening the detection beam path before the beginning of a scanning operation, and blocking the detection beam path at the end of the scanning operation.

Claim 17 (new): The method as defined in Claim 15, further comprising extrapolating the future change over time in the detection light power level using the control means.

Claim 18 (new): The method as defined in Claim 12, wherein the shutter means contains a mechanical shutter or an electrooptical element or acoustooptical element or LCD element.

Claim 19 (new): The method as defined in Claim 12, wherein the detector contains a photodiode, in particular an avalanche photodiode, or a CCD element, in particular an EMCCD element, or a photomultiplier or photomultiplier array.

Claim 20 (new): The method as defined in Claim 12, wherein the scanning microscope is a confocal scanning microscope.